

Film Scanner

Operating Instructions

UY-S100

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED.

Owner's Record

The model and serial numbers are located at the rear.

Record the serial number in the space provided below.

Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. UY-S100

Serial No. _____

For the Customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

Description of signal words

WARNING: Used for the critical situation which may possibly cause a death or serious injury if the situation is not avoided.

CAUTION: Used for the critical situation which may possibly cause a slight injury or a medium degree of injury if the situation is not avoided. This word is also used for the critical situation under which a material damage will be caused.

Note

It is forbidden to copy or duplicate copyrighted matters without the permission of the copyright holder. Possession of copies or duplicates of currency, coins, securities, uncanceled stamps or postcards, revenue stamps and other certificates of value is punishable by law.

IMPORTANT SAFETY INSTRUCTIONS

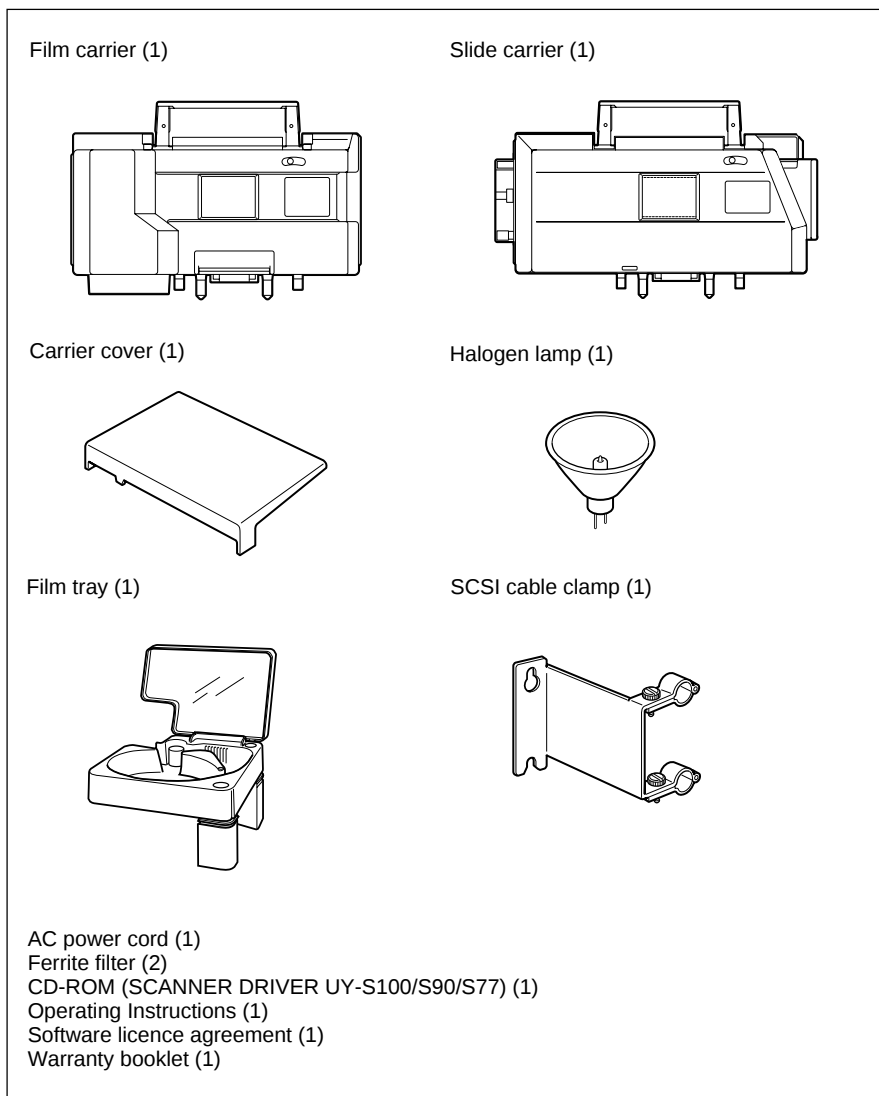
When using your photographic equipment, basic safety precautions should always be followed, including the following:

1. Read and understand all instructions before using.
2. Close supervision is necessary when any appliance is used by or near children. Do not leave appliance unattended while in use.
3. Care must be taken as burns can occur from touching hot parts.
4. Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged — until it has been examined by a qualified service personnel.
5. Position the cord so that it will not be tripped over, pulled, or contact hot surfaces.
6. If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cords rated for less amperage than the appliance may overheat.
7. Always unplug appliance from electrical outlet before cleaning and servicing and when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.
8. Let appliance cool completely before putting away. Loop cord loosely around appliance when storing.
9. To reduce the risk of electric shock, do not immerse this appliance in water or other liquids.
10. To reduce the risk of electric shock, do not disassemble this appliance, but take it to a qualified service personnel when service or repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.
11. The use of an accessory attachment not recommended by the manufacturer may cause a risk of fire, electric shock, or injury to persons.
12. Connect this appliance to a grounded outlet.

SAVE THESE INSTRUCTIONS

Checking the Package

The Film Scanner comes together with the following accessories. Check that nothing is missing from your package.



Notes

- Retain the original carton and packing materials in case you have to transport the unit in the future.
- Remove the carrier when transporting the Film Scanner.
- The optional UYA-S77TR film tray cannot be used with this unit. Use the supplied film tray only.

Table of Contents

Introduction

Features	6
Location and Function of Parts and Controls	7

Using the Film Scanner

Hooking Up	8
Attaching the supplied SCSI cable clamp	9
Setting the DIP Switch	10
Installing the Scanner Software	11
Usable Films and Carriers	12
Mounting/Removing the Carrier	13
Loading the Film in the Carrier	14
Loading a sleeve film into the carrier	14
Loading a slide into the carrier	14
Loading an IX240 cartridge film into the carrier	15
Turning the Power ON/OFF	16

Maintenance, Checking and Other Information

Precautions	17
About the conditions of film ends and remedies	17
On safety	19
On installation	19
On heat build-up	19
On cleaning	19
On repacking	19
Maintenance	20
Cleaning inside the film carrier	20
Cleaning cabinet	20
Troubleshooting	21
Specifications	22

The UY-S100 Film Scanner scans negative film or slides. This manual contains precautions, explanations for installation, connection, information for using the films, and so on. For information about the procedures for scanning films using the Film Scanner, please consult the Software Manual stored in the supplied CD-ROM.

Scanning various types of film is possible

By changing the carriers, scanning the following types of film is possible:

- sleeve film (color negative, color positive or monochrome)
- slide (mounted 135 film, or mounted IX240 film)
- IX240 cartridge film

Selection of four scanning resolutions

You can choose from four scanning resolutions for either 135 film or IX240 film.

The following shows the available resolution modes and the number of scanned pixels when 135 film is scanned in the normal cropping mode.

- LD: low definition (384 × 256 pixels)
- SD: standard definition (768 × 512 pixels)
- HD: high definition (1,536 × 1,024 pixels)
- UD: ultra definition (3,072 × 2,048 pixels)

Note

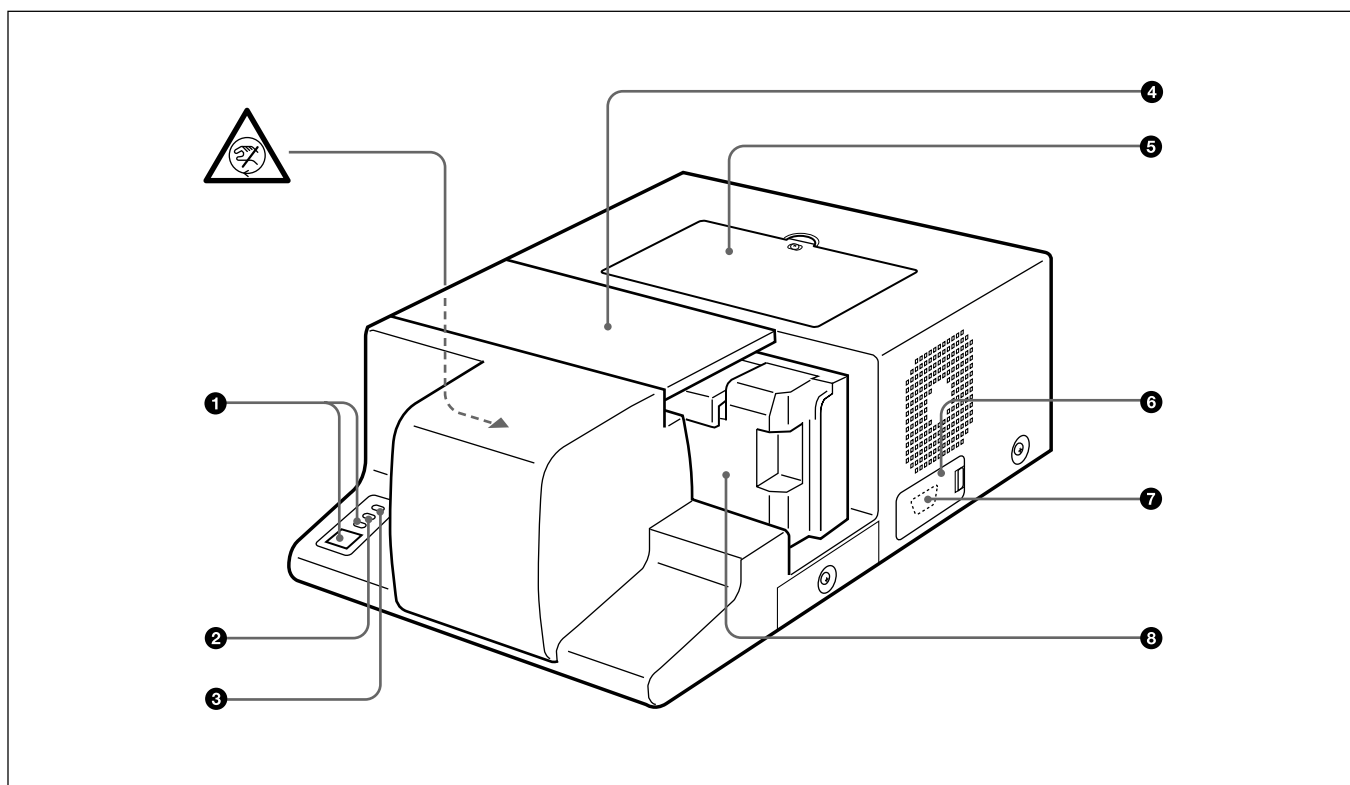
The number of scanned pixels differs according to the film type and cropping mode (panorama, slide, etc.).

Manual adjustment of colors and density of pictures is possible

You can manually adjust the density, and colors (for color pictures) or contrast (for monochrome pictures) of the prescanned image. In addition, the full correction which adjusts a picture taken under different lighting conditions from other pictures, and the lower correction which adjusts a picture composed almost in one color, are possible.

Consult the Software Manual about procedures.

Location and Function of Parts and Controls



❶ POWER switch and indicator (green)

Press to turn the Film Scanner on or off.
The indicator lights up while the power is ON.

❷ BUSY indicator (green)

Lights while the Film Scanner is in operation.

❸ ALARM indicator (orange)

Lights when a problem occurs.

❹ Carrier cover

Protects the carrier.

If the carrier cover is open, prescanning and scanning cannot be performed. Also, opening the cover during prescanning or scanning stops the operation. Make sure to close the carrier cover.

❺ Lamp cover

The halogen lamp is inside.

If the lamp cover is open, prescanning and scanning cannot be performed. Also, opening the cover during prescanning or scanning stops the operation. Make sure to close the lamp cover.

Replacing the halogen lamp

The life of the halogen lamp is **about 1,000 hours**.
When the supplied lamp burns out, replace it with the MPS-L60 lamp (not supplied).

For replacement of the halogen lamp, contact your authorized Sony dealer.

❻ Connector cover

The slide feeder connector is inside.

❼ Slide feeder connector (D-sub 9-pin)

Connect the optional UYA-S90SF auto slide feeder.

Caution

This connector allows the connection of the UYA-S90SF only. Never connect other equipment, as doing so may cause electrical shock or damage to the equipment.

❽ Carrier

Use the correct carrier according to the types of film.
For details, see page 12.

Caution



To avoid injury, do not insert your hand or fingers into the movable area of the carrier.

Hooking Up

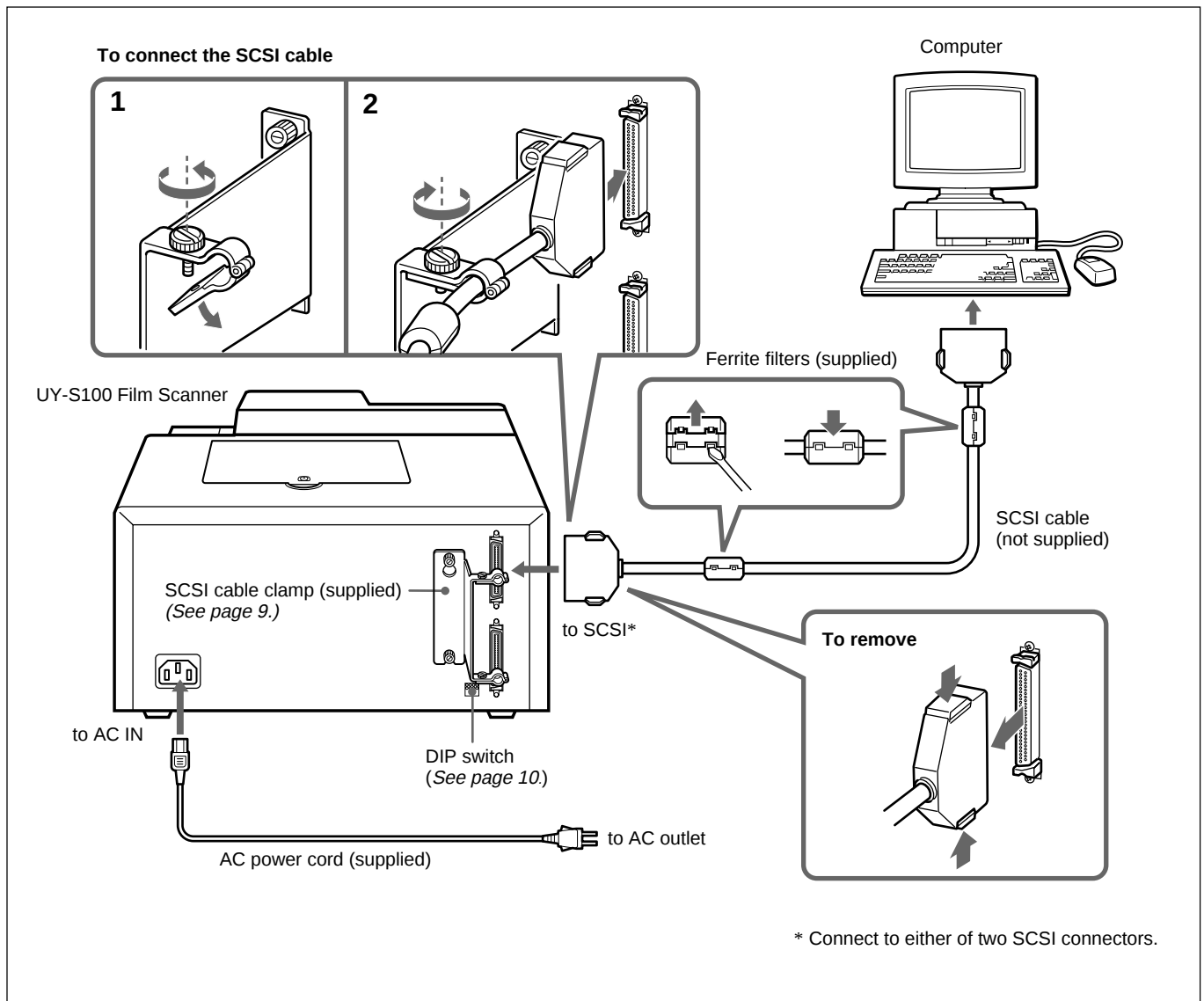
The Film Scanner connects to the computer that supports the SCSI interface.

Caution

Turn off the power for each device before attempting to make any connections. Otherwise, electrical shock may be caused or the device may be damaged.

Notes

- Connect the AC power cord last.
- For details about connections of computer, consult its manual as well.



Notes on the SCSI cabling

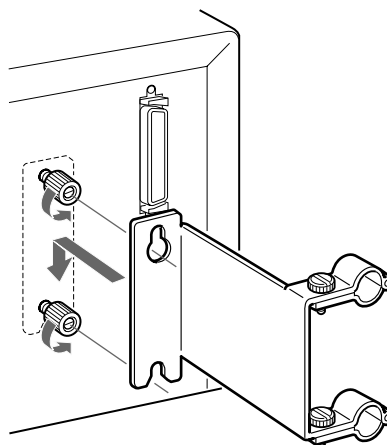
- Insert the connector into the socket firmly.
- The total length of the SCSI cabling used with a single-host computer should be less than 3 meters (10 feet).
- The length of the SCSI cabling used with a single-host computer should be less than 1 meter (3 feet 3 inches).
- If your SCSI cable is not equipped with ferrite filters, attach the supplied ferrite filters near the connectors at both ends of the cable. (*See the figure on page 8.*)

To attach the ferrite filters, release the lock of the ferrite filter with a screwdriver or a similar tool, pass the cable through the ferrite filter and lock the filter in place.

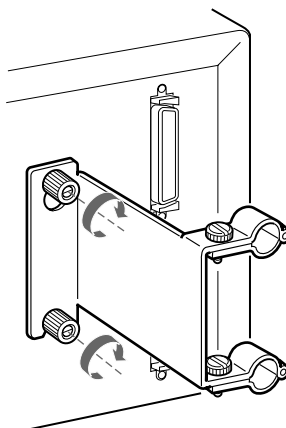
Attaching the supplied SCSI cable clamp

To secure the SCSI cabling, use the supplied SCSI cable clamp. Attach the SCSI cable clamp to the rear panel of the scanner as follows:

- 1** Hook the SCSI cable clamp to the screws on the rear panel.

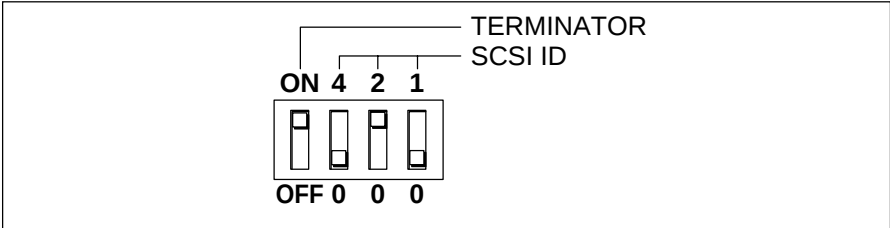


- 2** Tighten the screws.



Setting the DIP Switch

The DIP switches on the rear panel determine the on/off state of the internal SCSI bus terminator and SCSI device ID number. The DIP switches are preset at the factory to “2” as shown below.



Note

Turn off the power before changing the DIP switch setting.

TERMINATOR ON/OFF setting

ON: If the scanner is located at the end of the SCSI bus, this switch should be set to ON. The internal terminator is ON.

OFF: If another device is at the end of the bus, this switch should be OFF.

SCSI ID setting

The SCSI ID selection must be different from any other device on the bus. If two SCSI ID devices have the same ID, a malfunction will occur.

SCSI ID	SCSI ID switches
0	0 0 0
1	0 0 1
2	0 0 0
3	0 1 1
4	0 0 0
5	0 1 1
6	0 1 0
7	0 1 1

Installing the Scanner Software

The UY-S100 Film Scanner is supplied with the TWAIN driver and utility program in the CD-ROM.

In addition, the instruction manual (Software Manual) for the scanner is also stored in the CD-ROM.

When using the scanner for the first time

Before starting operation, install the scanner driver program and perform required setup.

For details, read the “README” file in the CD-ROM.

Updating the driver program and firmware

You can download the updated driver program and scanner firmware via the Internet.

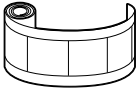
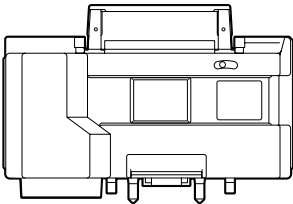
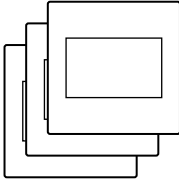
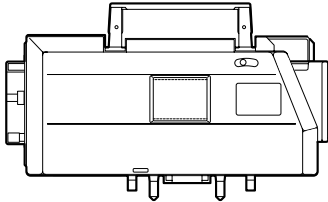
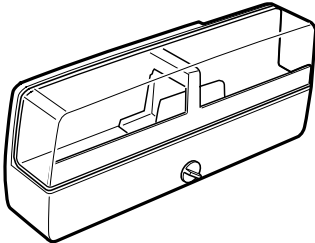
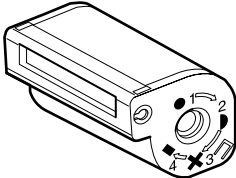
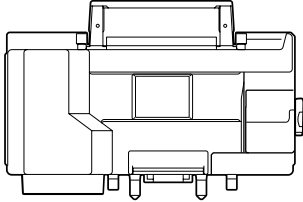
Access the following site:

<http://www.sony.co.jp/en/Products/DP-driver/index.html>



Usable Films and Carriers

The carrier is a device which loads film or slides in the correct position. Mount a carrier appropriate to the type of film to be scanned.

Film	Carrier
135 film - Sleeve film  - Film with more than three frames* 	Film carrier (supplied) 
135 film, IX240 film Slides (mounted) 	Slide carrier (supplied)  UYA-S90SF auto slide feeder (optional) 
IX240 cartridge film 	IX240 film carrier (optional) 

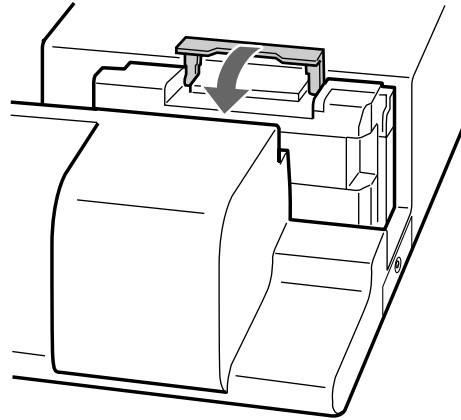
* The length of three frames should be more than 114 mm or 4 1/2 in. (38 mm or 1 1/2 in. × 3).
 A film with a length of less than 114 mm or 4 1/2 in. cannot be scanned.

Mounting/Removing the Carrier

Mounting and removing procedures are the same for all types of carriers. The illustration below shows the supplied film carrier.

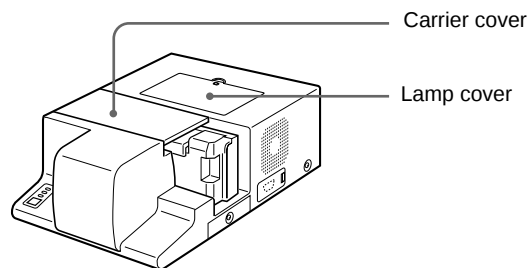
Mounting the carrier

Insert the carrier down into the scanner and fold down the handle to lock. Then close the carrier cover.



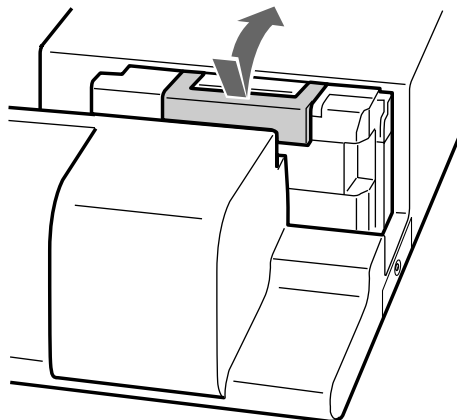
Note

Be sure to close the carrier cover and lamp cover. If either cover is open, prescanning and scanning cannot be performed. Also, opening the cover during prescanning or scanning stops the operation.



Removing the carrier

Press the handle to unlock and lift the carrier.

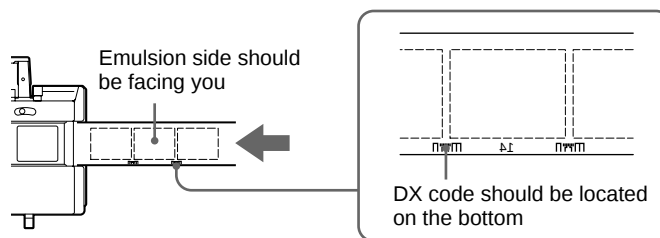


Loading the Film in the Carrier

This section explains the procedures for loading each type of film in the carrier. For the procedures previous to loading the film, consult the instruction manual (Software Manual) stored in the supplied CD-ROM.

Loading a sleeve film into the carrier

Insert the film from the last frame so that the frame numbers are reversed or the emulsion side facing you. Film is automatically fed into the carrier.

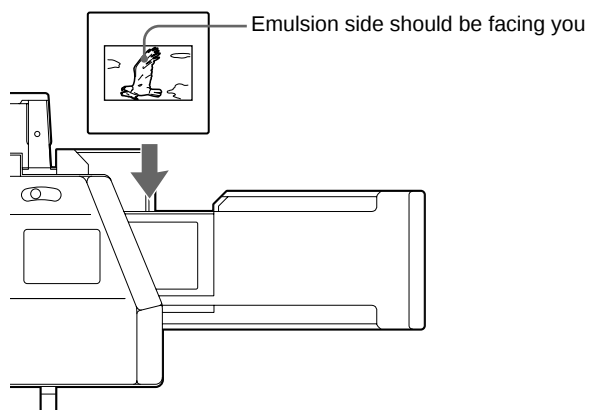


Notes

- If the film contains a transparent portion such as an exposed area of positive film, the film cannot be fed properly. Cut off the transparent portion.
- The curling condition of the sleeve film and film ends may cause feeding error. Fix the film correctly before inserting it into the carrier.
For details, see "About the conditions of film ends and remedies" on page 17.

Loading a slide into the carrier

Insert the slide into the carrier with the emulsion side facing you, and push in the carrier fully.



Loading slides one by one automatically

The optional UYA-S90SF auto slide feeder allows you to load slides one by one automatically.

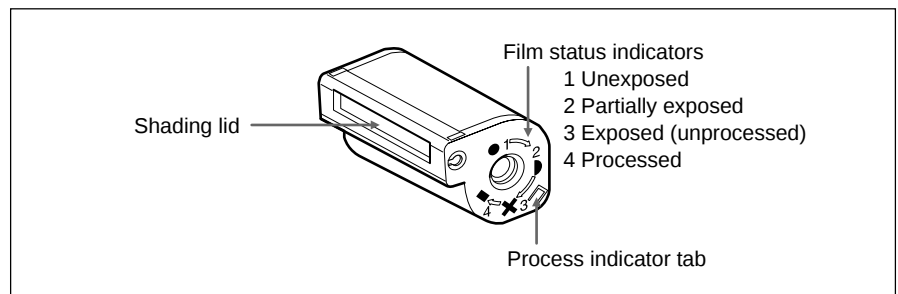
For details on the use of the auto slide feeder, refer to the operating instructions supplied with the auto slide feeder.

Loading an IX240 cartridge film into the carrier

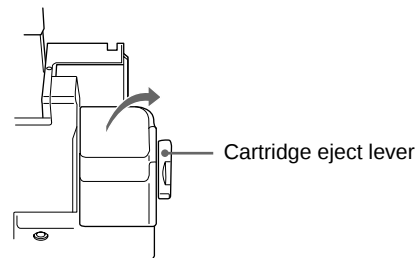
Notes

- Before inserting the cartridge, make sure that the shading lid is closed.
- Be sure to use only processed cartridge film whose process indicator tab is removed. If you insert a cartridge with its tab intact or not removed completely, “Not processed film is in this cartridge. Please remove the cartridge.” appears on the screen. In this case, make sure that the cartridge film is processed and remove the tab completely. Then insert the cartridge film again.
- Do not touch the carrier or open the lid of the cartridge holder during prescanning or scanning. This may cause improper scanning.

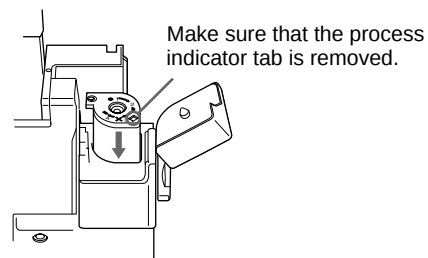
Parts identification of IX240 cartridge film



- 1** Press the cartridge eject lever and open the lid.



- 2** Insert the cartridge with the film status indicator end up.

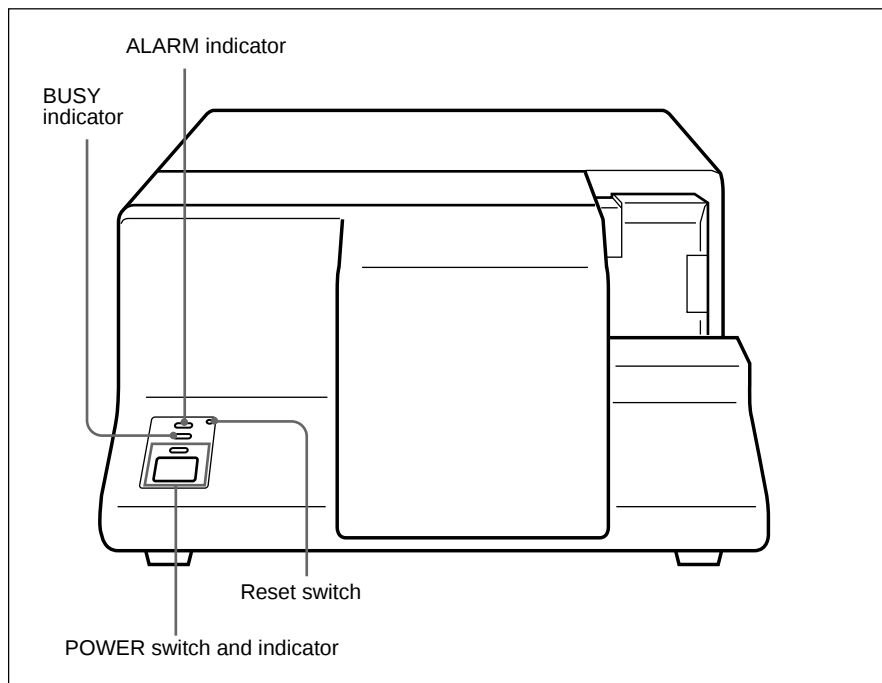


- 3** Close the lid.

Turning the Power ON/OFF

Note

Turn on the power of the computer after turning on the power of all the other devices.



Turning on the power of the Film Scanner

Press the POWER switch for two seconds or more until the green POWER indicator lights. The power of the scanner turns on.

When you release the POWER switch, the green BUSY indicator lights and the green POWER indicator flashes. During this period, the unit initializes the carrier conditions. When the initialization is completed, the BUSY indicator goes out and the POWER indicator remains lit in green.

Note

If any trouble occurs when the power is turned on, the ALARM indicator remains lit in orange. In this case, check if the carrier, carrier cover and lamp cover are mounted correctly. (page 13)

Turning off the power of the Film Scanner

Press the POWER switch for two seconds or more until the green POWER indicator starts flashing, then release the switch.

Note

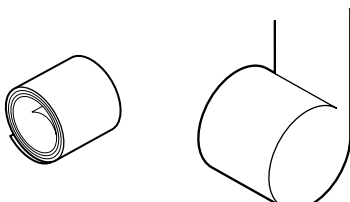
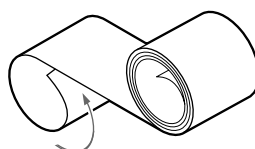
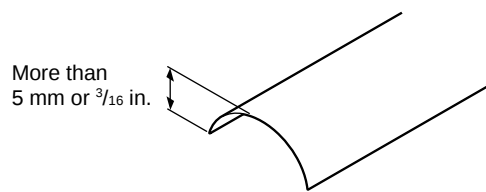
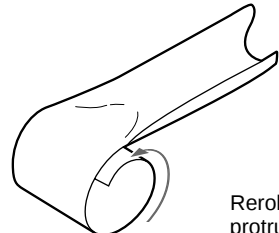
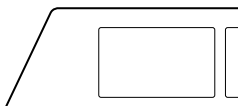
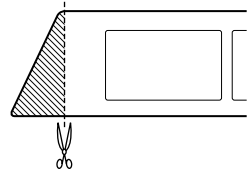
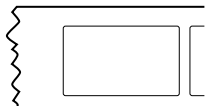
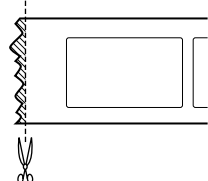
If you cannot turn off the power using the POWER switch, press the reset switch using a thin tool.

About the conditions of film ends and remedies

In order to avoid feeding errors of the sleeve film in the film carrier, check the curling condition of the film and film ends before inserting it into the film carrier. Please fix the following before inserting the film into the carrier.

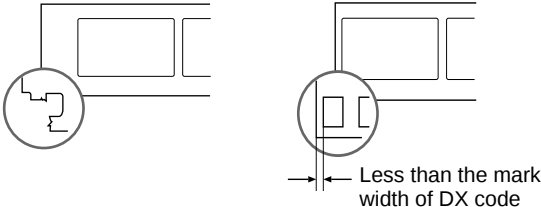
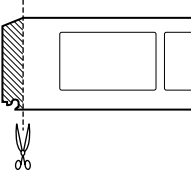
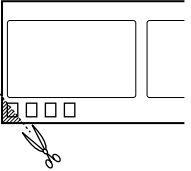
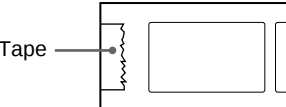
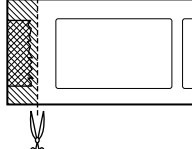
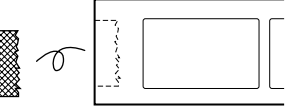
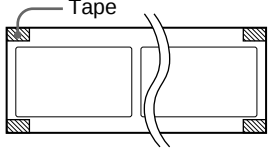
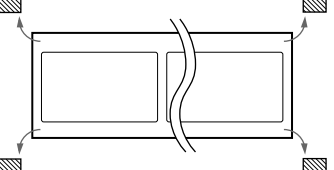
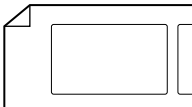
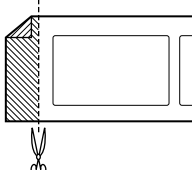
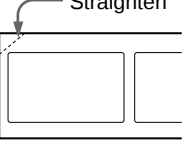
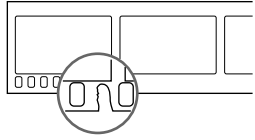
Notes

- If film in bad condition is inserted, it could cause feeding errors or damage the film.
- If positive film (sleeve) has a transparent portion at the end, it might be mispositioned during scanning. Please cut the film end so that the transparent portion is eliminated.

	Sleeve film conditions	Remedies
Curling conditions	Sleeve film curls strongly so that the end curls to form a circle when hanging. 	Reroll both ends of the film in the opposite direction of the curl (for about 20 cm or 8 in. each).  Reroll in the opposite direction of the curl (If they cannot be fixed, insert the film while correcting the curls by hand.)
	The following curl is more than 5 mm or $\frac{3}{16}$ in. More than 5 mm or $\frac{3}{16}$ in. 	Reroll both ends of the film in the direction of protrusion of the curls (for about 20 cm or 8 in. each).  Reroll in the direction of protrusion of the curls
Film ends conditions	An end is cut diagonally. 	Cut it perpendicularly. 
	An end is torn. 	Cut it perpendicularly. 

(continued)

Precautions

	Sleeve film conditions	Remedies
Film ends conditions	Perforations are broken or space between the last perforation and the film end is too small. 	If there is enough space between the broken perforation and the image area, cut the broken portion.  If there is not enough space, cut it off diagonally. 
	Tape is attached at the end. 	If there is enough space between the taped portion and the image area, cut the taped portion.  If there is not enough space, peel off the tape completely. 
	Tape is attached at all edges. 	Remove the tape so as not to break the perforations. Peel them off so that no tape remains. 
	Ends are folded. 	If there is enough space between the folded end and the image area, cut the folded end.  If there is not enough space, straighten the folded portion. 
Perforation conditions	Space between perforations is broken. 	Fix the broken portion with tape. (If an end of the film is broken, cut it off.)

On safety

- The rating plate indicating operating voltage, power consumption, etc. is located at the rear.
- Should any solid object or liquid fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days or more.
- To disconnect the AC power cord, pull it out by the plug. Never pull the cord itself.
- Do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.
- Do not replace the halogen lamp by yourself when it is burned out. Ask your authorized Sony dealer to replace the halogen lamp.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust or humidity, mechanical vibration or shock.
- If the unit is brought directly from a cold to a warm location, moisture may condense inside the unit and cause damage to the unit. When you first install the unit, or when you move it from a cold to a warm location, wait for a while before operating the unit.

On heat build-up

Heat builds up in the unit if it is used for an extended period of time. If this occurs, allow the unit to cool down.

On cleaning

To keep the unit looking brand-new, periodically clean it with a mild detergent solution. Never use strong solvents, such as thinner or benzene, or abrasive cleansers since these will damage the cabinet. As a safety precaution, unplug the unit before cleaning it.

On repacking

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit.

When shipping the unit to another location, repack it as illustrated on the carton.

If you have any questions about this unit, contact your authorized Sony dealer.

NOTICE TO USERS

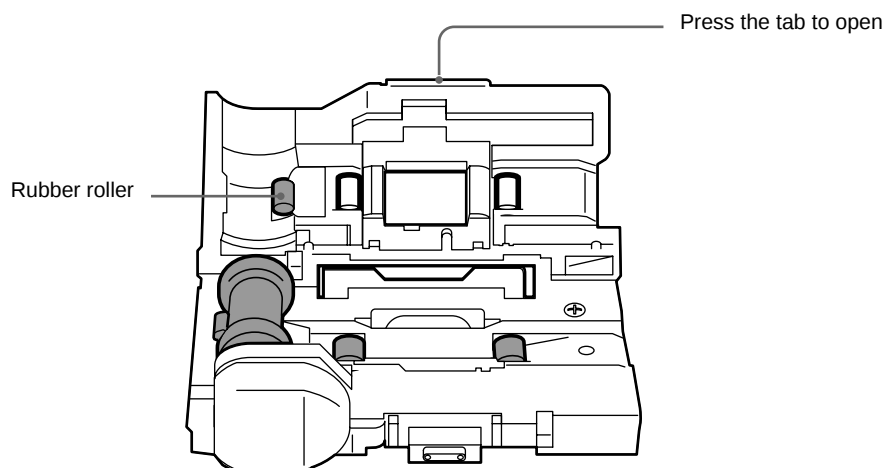
IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT, CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL, THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice.

The software described herein may also be governed by the terms of a separate user license agreement.

Cleaning inside the film carrier

There are five rubber rollers (shaded in the figure below) inside the film carrier. Clean away the dust and dirt on the rubber rollers using alcohol. Otherwise, the dust and dirt may slip on to the film and causes film misfeeding. **We recommend that you clean the rubber rollers once a day.**



Note

Use alcohol for cleaning the rubber rollers only. Do not use it for cleaning other portions.

Cleaning cabinet

When the cabinet becomes dirty, wipe it with a close moistened with water or neutral detergent dissolved in water. Do not use benzene, alcohol, thinner or chemical cloth as they may damage the finish.

Before calling service personnel, please check your unit and consult the Software Manual again. If it still doesn't work properly, ask your dealer.

The power does not turn on.

- Check the power cord is connected correctly. *(page 8)*
- Check you pressed the POWER switch for two seconds or more. *(page 16)*

The power does not turn off.

- Check you pressed the POWER switch for two seconds or more. *(page 16)*

Scanning does not perform.

- Check the SCSI cables are connected correctly. *(page 8)*
- Check both ends of SCSI interface are terminated. *(page 10)*
- Check two SCSI ID devices have the same ID. *(page 10)*
- Check the software is installed correctly. *(See Software Manual)*

Carrier does not move.

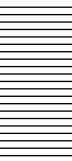
- Check if the carrier cover or lamp cover is open. *(page 13)*
- Check you removed the packing materials.
- Check if the halogen lamp is burned out. *(page 7)*

Scanned image appears strange.

- Check if you applied force to the carrier. Remove the carrier and mount it again.
- Check the halogen lamp is turned on. Blocking the ventilation holes may cause the lamp to turn off.
- Check if you applied vibration to the unit during scanning.
- Check if the halogen lamp is burned out. *(page 7)*
- If you are using the slide carrier, check if you mounted the carrier with its holder pushed in.
- Check the software is set up correctly. *(See Software Manual)*

Film cannot be fed properly.

- Check the curling condition or end conditions of the film. *(page 17)*
- Check if the film is tangled or excessive force was applied to the film.
- Check if you mounted or removed the film carrier with film inside.
- Check dew condensation. *(page 19)*
- Check the rollers inside the film carrier are clean. *(page 20)*
- Check if film or tape is left in the film carrier.



Specifications

Image scanner section

Image memory	4,096 × 2,048 dots × 8 bits for each RGB
SCSI terminal	Half-pitch 50-pin connector (2)
Scanner type	Draft shifting type/Transmission color image scanner
Scanning method	1 path scanning with 3-line color CCD
Image sensor	3-line color CCD, 2,700 picture elements
Light source	Halogen lamp 24V, 60W
Scanning size	135 film: 23.5 × 35.3 mm IX240 film: 15.6 × 27.8 mm
Maximum resolution	135 film, IX240 film (slide): 2,212 dpi IX 240 film (cartridge): 3,326 dpi

General

Power requirement	100 – 120/220 – 240 V AC, 50/60 Hz
Input current	1.2 A max. with maximum input load at 100 V AC 0.6 A max. with maximum input load at 220 V AC
Operating temperature	5 – 35 °C (41 – 95 °F)
Operating humidity	30 – 85 % RH

Dimensions

Main unit: 280 × 148 × 431 mm
(w/h/d) (11¹/₈ × 5⁷/₈ × 17
inches) not including connectors
on the rear

Film carrier: 201 × 110 × 58 mm
(w/h/d) (8 × 4³/₈ × 2³/₈ inches)

Slide carrier: 232 × 96 × 40 mm
(w/h/d) (9¹/₄ × 3⁷/₈ × 1⁵/₈
inches) not including projecting
part

Mass

Main unit: Approx. 9.8 kg (21 lb 10
oz)

Film carrier: Approx. 0.7 kg
(1 lb 9 oz)

Slide carrier: Approx. 0.4 kg
(14 oz)

Supplied accessories

Film carrier (1)
Slide carrier (1)
Halogen lamp (1)
Carrier cover (1)
Film tray (1 set)
SCSI cable clamp (1)
AC power cord (1)
Ferrite filter (2)
CD-ROM (SCANNER DRIVER
UY-S100/S90/S77) (1)
Operating Instructions (1)
Software licence agreement (1)
Warranty booklet (1)

Design and specifications are subject to change
without notice.

